RUDRAPRASAD CONSULTANTS

NAME OF WORK: PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY

2022

DETAILED PROJECT REPORT

SUBMITTED TO B.B.M.P, BANGALORE

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BRUHAT BENGALURU MAHANAGARA PALIKE

PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY

DETAILED PROJECT REPORT

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PROJECT: PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY

INTRODUCTION:

BENGALURU

Bengaluru officially known as Bangalore, is the capital of the Indian state of Karnataka. It has a population of about 8.42 million and a metropolitan population of about 8.52 million, making it the third most populous city and fifth most populous urban agglomeration in India. Located in southern India on the Deccan Plateau, at a height of over 900 m (3,000 ft) above sea level, Bengaluru is known for its pleasant climate throughout the year. Its elevation is the highest among the major large cities of India.

A succession of South Indian dynasties, the Western Gangas, the Cholas and the Hoysalas, ruled the present region of Bengaluru until in 1537 CE, Kempegowda a feudal ruler under the Vijayanagara Empire – established a mud fort considered to be the foundation of modern Bengaluru. The existing Kannada name, Bengaluru, was declared the official name of the city in 2006.

Now the city is one of the fastest growing cities in Asia. Bengaluru is known as the "Silicon Valley of India" (or "IT capital of India") because of its role as the nation's leading information technology (IT) export. Indian technological organizations ISRO, Infosys and Wipro are headquartered in the city. A demographically diverse city, Bengaluru is the second fastest-growing major metropolis in India. It is home to many educational and research institutions in

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India, such as Indian Institute of Science (IISc), Indian Institute of Management (Bengaluru) (IIMB), National Institute of Fashion Technology, Bengaluru, National Institute of Design, Bengaluru (NID R&D Campus), National Law School of India University (NLSIU) and National Institute of Mental Health and Neurosciences (NIMHANS). Numerous state owned aerospace and defence organisations, such as Bharat Electronics, Hindustan Aeronautics and National Aerospace Laboratories are located in the city. The city also houses the Kannada film industry. As a growing metropolitan city in a developing country, Bengaluru confronts substantial pollution and other logistical and socio-economic problems with a gross domestic product (GDP) of $83 billion. Bengaluru is ranked fourth in India by overall GDP contribution, after only Mumbai, Delhi and Kolkata

Along with the population the city has also seen many improvements in infrastructure road, highways. Flyovers are taking great part in the reduction of traffic.

Real estate is a critical aspect of much of the growth. The IT capital Bengaluru has surpassed both the commercial and political capitals of India as the top investment destination in the property market.

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BRUHAT BENGALURU MAHANAGARA PALIKE:

The **Bruhat Bengaluru Mahanagara Palike (BBMP)** is the administrative body responsible for the civic and infrastructural assets of the Greater Bengaluru metropolitan area.

The BBMP represents the third level of government, (the Central government and State Government being the first two levels). Bruhat Bengaluru Mahanagara Palike is run by a city council. The city council comprises elected representatives, called "corporators", one from each of the wards (localities) of the city. Elections to the council are held once every five years, with results being decided by popular vote. Members contesting elections to council represent one of more of the state's political parties. First elections to the newly created body were held on 28 March 2010, after the delays due to delimitation of wards and finalising voter lists.

The Bruhat Bengaluru Mahanagara Palike is the fourth largest Municipal Corporation in India, after the city corporations that administer Mumbai, Delhi and Chennai. The BBMP is responsible for infrastructural assets of the Greater Bengaluru Metropolitan area, spread across 741 km^2, with a population of 6.8 million.

Its roles and responsibilities include the "orderly development of the city" zoning and building regulations, health, hygiene, licensing, trade and education, as well as quality of life issues such as lung spaces, water bodies, parks and greenery

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OBJECTIVE OF THE PROJECT:

LED ART TOWER:

Light art is a visual art form in which light is the main medium of expression. It is an art form in which either a sculpture produces light, or light is used to create a "sculpture" through the manipulation of light, colours, and shadows. These sculptures can be temporary or permanent and can exist in two distinctive spaces.

1. **Indoor galleries, such as museum exhibits:**

Many modern art museums include light sculptures and installations in their permanent and temporary collections.

2. **Outdoors at events like festivals:**

Light festivals and the smart city LED revolution was driven by outdoor urban light sculpture with low energy LED luminaries.

LED art is a form of light art constructed from light-emitting diodes. LEDs (light emitting diodes) have become a new way to make street art. LEDs may be used in installation art, sculptural pieces and interactive artworks.

Criteria for site selection

The following criteria were used to assist in selecting the Multipurpose Building Site:

- People's need
- Accessibility

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- Public gathering
- Integration
- Recognition/visibility
- Potential for strong partners
- Potential for service collaboration/coordination
- Availability and opportunity and
- Financial viability

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CURRENT SCENARIO

FEATURES OF THE PROJECT

Location	: Yelahanka Assembly Constituency
Ownership	: Bruhat Bengaluru Mahanagara Palike
Possession	: Bruhat Bengaluru Mahanagara Palike
Essential service	: LED art tower
Cost of the project	: Rs. 2,00,00,000.00 (Two Crores Only)
Commencement of the project	: After the approval from the Competent body
Completion date as per agreement	: 12 months from the issue of work order

Features of the Project Includes:

- 9m LED art tower Burgeon shaped lighting tree

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FEASIBILITY STUDY

This project, "PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY" has viewed feasibility as involving the analysis of both social and financial issues.

The social component of the feasibility analysis involves understanding the following:

- Needs of local area people (both current and projected)
- The needs of service providers (both current and projected)
- Projected population growth and
- Public facility provision principles, standards and benchmarks

The financial component of the feasibility analysis was based on the fundamental assumption that BBMP would retain ownership of its real property and to provide an ability to respond flexibly to the changing needs and priorities. It has involved understanding:

- Any further development potential on the proposed site and potential uses
- The cost of providing the whole development

The feasibility Report of the project is concluded with the key features of the project planning proposals along with the area statements.

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PROPOSAL/PLANNING

Providing, supplying, installation, testing and commissioning of 9 mts LED art tower lighting (1 unit) with custom design consisting of

- Fabrication of external dimension of structure is dia 4472mm at ground dia 9634mm at top height 9075mm from ground.
- The structure has total of 10 no. Of horizontal support 7 nos of 4472mm dia,1nos Of 6193 mm dia, 1nos Of 7914 mm dia, 1no Of 9634mm dia.
- Horizontal annular rings are made up of 25mm od 2mm thick MS tubes rolled into arc with CNC machine for accurate and repeatable shapes.
- The structure has 18 to 20 no. Of vertical supports around the vertical rings equi spaced made up or 25mm od MS tube 2mm thick and bent into tree shapes.
- The structure is degresed and coated with zinc chromate primer at dispatched for effective corrosion protection.
- The burgeon tree structure is split into minimum of 4 sectors for ease of erection transportation and availability of material, at site the 4 sectors will be welded or mechanically fastened.
- 1800 nos LED Pixel Dot, Color: RGBW, Protection: IP65, Power consumption: 1.44W, PixelHousing Transparent PC Milk white diffuser, Control: SPI, DC5/12/24V, RGBW Pixels: 4 Channels, Working temperature: -20~85, Automatic address code.
- 1Nos Master Controller DVI, work with computer online, can be compatible with pixel editing software.

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- 2Nos Slave controller, DMX 512/ SPI, Power 5W, Ac input 110-240V, 50Hz, working temperature -30 D to +65D.
- 20Nos DC power driver, Power: 350W, Input: AC 110-240 V AC, 50Hz, Output: DC5/12V, Protection: rainproof.
- 200Nos PVC insulated multi core electrical unarmored flexible 3Cx2.5 Sq mm power cable having lessel ectrical losses. This PVC insulated and round sheathed wire features a bright multistrands copper conductors and it supports voltage grade up to 1100V.
- 500 mts PVC insulated multi core electrical unarmored flexible 2Cx1.5 Sq mm power cable having less electrical losses. This PVC insulated and round sheathed wire features a bright multi strands copper conductors and it supports voltage grade up to 1100V.
- 120mts LAN/RJ45 comprises twisted pairs with shield support carrying of data issued for connecting all light consoles that use DMX 512 standard data transmission.
- 1Nos power distribution board made up of MS sheet metal fabricated housing black powder coated and ivory connectors for the internal terminations and external outgoing connecting points, fibre/brass glands of suitable size fitted MCB control for outgoing circuits. 6Nos of 16A SP outgoing MCB's. 1No of 16A TPN incoming MCB.
- 4Nos IP driver box made up of MS sheet metal fabricated housing black powder coated and ivory connections for the internal terminations and external outgoing connecting points, fibre/brass glands of suitable size fitted MCB control for outgoing circuits and programming with different designs as per the requirement. And 100

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set of T & I connections with cable for driver loop and additional accessories for installing the lights as per the final drawing/ site conditions consisting of clamps, brackets, angles, conduits, joints, hardware, like fasteners, nuts, & bolts etc.

FINANCIAL IMPLICATION:

This is a government project and there will not be any collection of revenue for using this building on day to day basis .This will be maintained by BBMP.

BUDGET PROVISION:

In the proposed budget of Bengaluru Mahanagara Palike i.e., 2021-22, Rs.2,00,00,000.00 (Two Crores Only) been provided for the Work of "PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY".

CONCLUDING REMARKS:

This project, "PROVIDING SCULPTURE/ MURALS AT PARKS, LAKES, AND JUNCTIONS IN YELAHANKA ASSEMBLY CONSTITUENCY" will be useful as per the requirements. This Project Enhances the Atheists of the Location and Also Attracts many Tourists thereby creating employment opportunities and benefits for the local people.

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DETAILED ESTIMATE

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DRAFT TENDER SCHEDULE

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BILL OF QUANTITIES

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